03 - Salaries

August 3, 2022

1 SF Salaries

** Import pandas as pd.** [6]: ** Read Salaries.csv.** [7]: ** Check the head of the DataFrame. ** [8]: [8]: Ιd EmployeeName JobTitle GENERAL MANAGER-METROPOLITAN TRANSIT AUTHORITY 0 1 NATHANIEL FORD GARY JIMENEZ 1 2 CAPTAIN III (POLICE DEPARTMENT) 2 CAPTAIN III (POLICE DEPARTMENT) ALBERT PARDINI 3 CHRISTOPHER CHONG WIRE ROPE CABLE MAINTENANCE MECHANIC 4 PATRICK GARDNER DEPUTY CHIEF OF DEPARTMENT, (FIRE DEPARTMENT) BasePay OvertimePay OtherPay Benefits TotalPay TotalPayBenefits 0 167411.18 0.00 400184.25 567595.43 567595.43 NaN 155966.02 245131.88 137811.38 NaN 538909.28 538909.28 1 212739.13 106088.18 16452.60 NaN 335279.91 335279.91 3 77916.00 56120.71 198306.90 NaN 332343.61 332343.61 134401.60 9737.00 182234.59 NaN326373.19 326373.19 Year Notes Agency Status 2011 NaN San Francisco NaN 1 2011 San Francisco NaN NaN 2 2011 San Francisco ${\tt NaN}$ NaN 3 2011 NaN San Francisco NaN 2011 San Francisco NaN NaN ** Use the .info() method to find out how many entries there are.** [9]:

```
<class 'pandas.core.frame.DataFrame'>
     RangeIndex: 148654 entries, 0 to 148653
     Data columns (total 13 columns):
     Ιd
                          148654 non-null int64
     EmployeeName
                          148654 non-null object
     JobTitle
                          148654 non-null object
     BasePay
                          148045 non-null float64
     OvertimePay
                          148650 non-null float64
     OtherPay
                          148650 non-null float64
     Benefits
                          112491 non-null float64
     TotalPay
                          148654 non-null float64
     TotalPayBenefits
                          148654 non-null float64
     Year
                          148654 non-null int64
     Notes
                          0 non-null float64
                          148654 non-null object
     Agency
                          0 non-null float64
     Status
     dtypes: float64(8), int64(2), object(3)
     memory usage: 14.7+ MB
     What is the average BasePay?
[10]:
[10]: 66325.44884050643
     ** What is the highest amount of OvertimePay in the dataset? **
[11]:
[11]: 245131.88
     ** What is the job title of JOSEPH DRISCOLL? Note: Use all caps, otherwise you may get an
     answer that doesn't match up (there is also a lowercase Joseph Driscoll). **
[12]:
[12]: 24
            CAPTAIN, FIRE SUPPRESSION
      Name: JobTitle, dtype: object
     ** How much does JOSEPH DRISCOLL make (including benefits)? **
[13]:
[13]: 24
            270324.91
      Name: TotalPayBenefits, dtype: float64
     ** What is the name of highest paid person (including benefits)?**
[14]:
```

```
[14]:
         Ιd
               EmployeeName
                                                                      JobTitle \
          1 NATHANIEL FORD GENERAL MANAGER-METROPOLITAN TRANSIT AUTHORITY
           BasePay OvertimePay
                                   OtherPay
                                            Benefits
                                                         TotalPay
                                                                    TotalPayBenefits \
      0 167411.18
                             0.0 400184.25
                                                        567595.43
                                                                           567595.43
                                                   NaN
         Year Notes
                              Agency
                                      Status
                      San Francisco
      0 2011
                 NaN
                                         NaN
     ** What is the name of lowest paid person (including benefits)? Do you notice something strange
     about how much he or she is paid?**
[15]:
                  Id EmployeeName
                                                       JobTitle BasePay
                                                                           OvertimePay
[15]:
              148654
                         Joe Lopez Counselor, Log Cabin Ranch
                                                                                   0.0
      148653
                                                                      0.0
              OtherPay Benefits TotalPay TotalPayBenefits Year Notes \
      148653
               -618.13
                              0.0
                                    -618.13
                                                       -618.13
                                                                2014
                                                                         NaN
                      Agency
                              Status
              San Francisco
      148653
                                 NaN
     ** What was the average (mean) BasePay of all employees per year? (2011-2014)? **
[16]:
[16]: Year
      2011
              63595.956517
      2012
              65436.406857
      2013
              69630.030216
      2014
              66564.421924
      Name: BasePay, dtype: float64
     ** How many unique job titles are there? **
[17]:
[17]: 2159
     ** What are the top 5 most common jobs? **
[18]:
[18]: Transit Operator
                                       7036
      Special Nurse
                                       4389
      Registered Nurse
                                       3736
      Public Svc Aide-Public Works
                                       2518
```

Police Officer 3 2421 Name: JobTitle, dtype: int64 ** How many Job Titles were represented by only one person in 2013? (e.g. Job Titles with only one occurence in 2013?) ** [19]: [19]: 202 ** Bonus: Is there a correlation between length of the Job Title string and Salary? ** [22]: [23]: [23]: title_len TotalPayBenefits 1.000000 title_len -0.036878 TotalPayBenefits -0.036878 1.000000